## **Applications of GPS/GNSS in NOAA**



## NOAA-Wide Workshop October 24-25, 2007 Boulder, Colorado



The Global Positioning System (GPS) was developed by the U.S. Department of Defense in the 1980's as a dual-use system with both military and civilian applications. The use of GPS within NOAA is ubiquitous. A few well known examples include: positioning and navigation of NOAA ships and aircraft; tracking radiosondes and dropwinsondes; documenting the locations of NOAA facilities; monitoring changes in water level; timing and control for the National Lightning Data Network; establishment of the National Spatial Reference System; high accuracy (geodetic) positioning for surveying, engineering and scientific research; marine and terrestrial mapping; Geographic Information Systems; and continuous location and monitoring of marine life. Within the last decade, important and largely unanticipated new uses of Global Navigation Satellite Systems (GNSS), of which GPS is but one, have emerged that include weather forecasting, space weather prediction, climate monitoring, and remote sensing.

The Directors of the NOS/National Geodetic Survey, NESDIS/National Geophysical Data Center, NWS/Space Environment Center, and the OAR/Earth System Research Laboratory invite your participation in a two-day, cross-NOAA workshop focused on how our agency currently uses and could expand uses of GPS or, more generally, the GNSS, in its research and operational activities. The GPS/GNSS Workshop is scheduled for October 24-25, 2007, at the David Skaggs Research Center located at 325 Broadway, Boulder, Colorado.

Presentations from all NOAA line offices are solicited; participation from NOAA Program Managers is encouraged. Contributors are asked to address the following question:

## How does GPS/GNSS benefit your mission?

This workshop is intended to:

- 1. Identify applications of GPS/GNSS within NOAA's functional areas of Ecosystems, Climate, Weather and Water, and Commerce and Transportation, and within the crosscutting areas of satellite, ship, and aircraft operations.
- 2. Assess how these applications and capabilities benefit NOAA.
- 3. Raise awareness and share information on how GPS/GNSS technology can enhance the effectiveness of other NOAA organizations in carrying out their missions.
- 4. Identify unmet needs or deficiencies and ways for NOAA to address them through GPS/GNSS solutions.
- 5. Consolidate this information and make specific recommendations to NOAA managers and other federal government agencies, including the National Space-Based Positioning, Navigation, and Timing Executive Committee that oversees GPS and related systems.

Please visit the GPS/GNSS Workshop website: <a href="http://www.ngdc.noaa.gov/stp/gnssw2007/">http://www.ngdc.noaa.gov/stp/gnssw2007/</a>

Click here or visit the website to download the registration form and fax it in by Oct 9, 2007.

## **Organizing Committee**